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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,822	10/06/2005	Rolf Metzger	23368	9464

535 7590 01/12/2009

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EXAMINER	
LAMB, BRENDA A	

ART UNIT	PAPER NUMBER
1792	

MAIL DATE	DELIVERY MODE
01/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,822	METZGER ET AL.	
	Examiner	Art Unit	
	Brenda A. Lamb	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-15 and 17-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10-13 and 18-20* is/are allowed.

6)☒ Claim(s) *9,14,15 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9, 14-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridley 4,135,477 in view Kamitani 6,146,708 and Watanabe 6,423,144.

Ridley teaches the design of a curtain coating die apparatus for applying a coating liquid to a web moving in a travel direction, the apparatus comprising: a hopper defining a distribution chamber extending transversely of the direction, a flow face extending generally in and transverse to the web-travel direction, a slot extending between the chamber and the flow face and elongated transversely of the direction; means for supplying the coating liquid to the chamber, thence through the slot to the flow face, and thence along the flow face and for dropping the liquid as a transversely

extending and downwardly flowing curtain from an edge of the flow face onto the web; and a pair of transversely spaced edge guides having upper guide elements having transversely confronting faces and fittable complementarily to the flow face, the upper guide elements lying in a use position substantially directly on the flow face to limit liquid flow to a region thereon defined between the transversely confronting faces that hence define the width of the curtain. Ridley fails to teach means for transversely positioning the edge guides thereby adjusting the curtain width. However, Kamitani teaches the curtain coating apparatus which is comprised of the following: a hopper defining a distribution chamber extending transversely of the direction, a flow face extending generally in and transverse to the web-travel direction, a slot extending between the chamber and the flow face and elongated transversely of the direction; means for supplying the coating liquid to the chamber, thence through the slot to the flow face, and thence along the flow face and for dropping the liquid as a transversely extending and downwardly flowing curtain from an edge of the flow face onto the web; and guide members 14,17 for providing the desired width of coating to be applied. Kamitani teaches that guide members 14 are movable along the width of the coating hopper. Kamitami also teaches width of the curtain is controlled or regulated by guide members 17 which are known in the art to be adjustable. Kamitani teaches in an alternate embodiment as shown in Figure 10 a means for adjusting the width adjustable guide means 14 (element 54). Therefore, it would have been obvious to modify Ridley apparatus by arranging its edge guides such they are transversely adjustable on the flow face of the hopper and are moved by a means for transversely positioning the edge

guides since Kamitani teaches as shown in Figure 9 transversely positioning or adjusting the width of upper guide member lying on the flow face of the curtain coating hopper to control the width of the curtain applied to the substrate and teaches in an alternate embodiment as shown in Figure 10 a means for transversely adjusting width adjustable guide members for the obvious reason of greater control of the width of curtain of coating applied to the substrate. Finally, Ridley fails to teach a supply passage opening generally centrally into the chamber. However, it would have been obvious to modify the Ridley curtain coating apparatus by arranging its supply passage and supply means such that it opens centrally into the chamber such as shown by Watanabe for the obvious advantage of uniform distribution of coating to the chamber. Thus claim 9 is obvious over the above cited references. With respect to claim 17, Watanabe teaches a pair of inserts which blocks the slot and coating chamber and a means for transversely displacing the inserts. Therefore, it would have been obvious given the Ridley apparatus as discussed to provide insert assemblies such as disclosed by Watanabe for controlling the width of material flowed from the slot of the Ridley nozzle or hopper for the obvious advantage of reducing the amount of coating need to fill the coating head by adjusting the void volume of the combination of the chamber and slot. With respect to claim 14, Ridley teaches the flow-face edge is curved and fits with the upper guide element. With respect to claim 15, Ridley teaches the flow face inclines downward from the slot to the edge.

Claims 9, 14-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridley 4,135,477 in view Kamitani 6,146,708 and Maejima 4,659,302.

Ridley teaches the design of a curtain coating die apparatus for applying a coating liquid to a web moving in a travel direction, the apparatus comprising: a hopper defining a distribution chamber extending transversely of the direction, a flow face extending generally in and transverse to the web-travel direction, a slot extending between the chamber and the flow face and elongated transversely of the direction; means for supplying the coating liquid to the chamber, thence through the slot to the flow face, and thence along the flow face and for dropping the liquid as a transversely extending and downwardly flowing curtain from an edge of the flow face onto the web; and a pair of transversely spaced edge guides having upper guide elements having transversely confronting faces and fittable complementarily to the flow face, the upper guide elements lying in a use position substantially directly on the flow face to limit liquid flow to a region thereon defined between the transversely confronting faces that hence define the width of the curtain. Ridley fails to teach means for transversely positioning the edge guides thereby adjusting the curtain width. However, Kamitani teaches the curtain coating apparatus which is comprised of the following: a hopper defining a distribution chamber extending transversely of the direction, a flow face extending generally in and transverse to the web-travel direction, a slot extending between the chamber and the flow face and elongated transversely of the direction; means for supplying the coating liquid to the chamber, thence through the slot to the flow face, and

thence along the flow face and for dropping the liquid as a transversely extending and downwardly flowing curtain from an edge of the flow face onto the web; and guide members 14,17 for providing the desired width of coating to be applied. Kamitani teaches that guide members 14 are movable along the width of the coating hopper. Kamitami also teaches width of the curtain is controlled or regulated by guide members 17 which are known in the art to be adjustable. Kamitani teaches in an alternate embodiment as shown in Figure 10 a means for adjusting the width adjustable guide means 14 (element 54). Therefore, it would have been obvious to modify Ridley apparatus by arranging its edge guides such they are transversely adjustable on the flow face of the hopper and are moved by a means for transversely positioning the edge guides since Kamitani teaches as shown in Figure 9 transversely positioning or adjusting the width of upper guide member lying on the flow face of the curtain coating hopper to control the width of the curtain applied to the substrate and teaches in an alternate embodiment as shown in Figure 10 a means for transversely adjusting width adjustable guide members for the obvious reason of greater control of the width of curtain of coating applied to the substrate. Finally, Ridley fails to teach a supply passage opening generally centrally into the chamber. However, it would have been obvious to modify the Ridley curtain coating die apparatus by arranging its supply passage and supply means such that it opens centrally into the chamber such as shown by Maejima for the obvious advantage of uniform distribution of coating to the chamber. Thus claim 9 is obvious over the above cited references. With respect to claim 17, Maejima teaches a pair of inserts which blocks the slot and coating chamber as shown

in Figure 3 and a means for transversely displacing the inserts as shown in Figure 1. Therefore, it would have been obvious given the Ridley apparatus as discussed to provide insert assemblies such as disclosed by Maejima for controlling the width of material flowed from the slot of the Ridley nozzle or hopper for the obvious advantage of reducing the amount of coating need to fill the coating head by adjusting the void volume of the combination of the chamber and slot. With respect to claim 14, Ridley teaches the flow-face edge is curved and fits with the upper guide element. With respect to claim 15, Ridley teaches the flow face inclines downward from the slot to the edge.

Applicant's arguments filed 9/28/2008 have been fully considered but they are not persuasive.

Applicant's argument that Kimatani and Maejima are both not analogous art is found to be non-persuasive. In response to applicant's argument that Kimatani and Maejima are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Kimatani teaches that the second embodiment as shown in Figure 9 is a curtain coater (see column 5 lines 29-35 and column 5 lines 61-67) and, therefore, it is analogous art. Further, Maejima is applied to teach in liquid dispensing nozzles in which the distribution chamber and slot opening is elongate and that the supply passage opens centrally into the chamber for the obvious advantage of uniform distribution of coating to the chamber. Kimatani shows in Figure

1, an alternate embodiment, that width of the chamber/manifold is elongated and slot opening to which the coating flows from the chamber/manifold is elongated like the slot opening of its curtain coater as shown in Figure 9. Therefore, it would have been obvious to modify Ridley apparatus by arranging its edge guides such they are transversely adjustable on the flow face of the hopper and are moved by a means for transversely positioning the edge guides since Kamitani teaches as shown in Figure 9 transversely positioning or adjusting the width of upper guide member lying on the flow face of the curtain coating hopper to control the width of the curtain applied to the substrate and teaches in an alternate embodiment as shown in Figure 10 a means for transversely adjusting width adjustable guide members for the obvious reason of greater control of the width of curtain of coating applied to the substrate. Finally, Ridley fails to teach a supply passage opening generally centrally into the chamber/manifold. However, it would have been obvious to modify the Ridley curtain coating die apparatus by arranging its chamber/manifold such its is elongated like its slot opening and arrange its supply passage for its supply means such that it opens centrally into the chamber/manifold such as shown by Maejima for the obvious advantage of uniform distribution of coating to the chamber and especially given Kamitani teaching of providing both the chamber/manifold and outlet opening with an elongated longitudinal dimension to obviously provide uniform distribution/flow of coating from the chamber/manifold to the outlet opening which is a slot. Thus the examiner maintains that claim 9 is obvious over the above cited references.

Claims 10-13 and 18-20 are allowed.

Note applicant in the remark section of the amendment filed 9/28/2008 that claim 20 depends on claim 18 and for examination purposes the examiner has indicated that claim 20 is allowable along with claim 18. However, claim 20, as presented in the last amendment, depends on claim 9 not claim 18 and in responding to the instant amendment needs to amend claim 20 such that it depends on claim 18 so as to corresponds to applicant's comments in the amendment filed 9/28/2008.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-

1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brenda A Lamb
Primary Examiner
Art Unit 1792

/Brenda A Lamb/

Primary Examiner, Art Unit 1792